Navy Regionalization of Legacy Technical Data

OPNAV N403B

10 April 2001

Regionalize Infrastructure

- JCALS is providing core infrastructure, connectivity, security, access, indexing, structured data repositories and “TM” applications for legacy data
- PM JCALS has agreed to:
  - Implement Regionalization for Navy
  - Replace obsolete structured data management tool
  - Use our regionalization implementation as pilot for all services

Evolution to COTS

JCALS Status

- Plan of action
  - SWP3.1 is scheduled to complete OT by Sep 01
    - **NLL/JCALS interface - cutover**
  - SWP3.2 will be maintenance drop for 3.1 fixes
  - SWP3.3 to be completed by Oct 02
    - Software include transition to thin client applications
    - Implementation of regionalization across all services
- JCALS should be web-client and regionalized for Navy by Oct 2001 dependant on -
  - Pilot Program
  - Tarantella product envisioned to be web portal into the enterprise

Typical "As Is" JCALS
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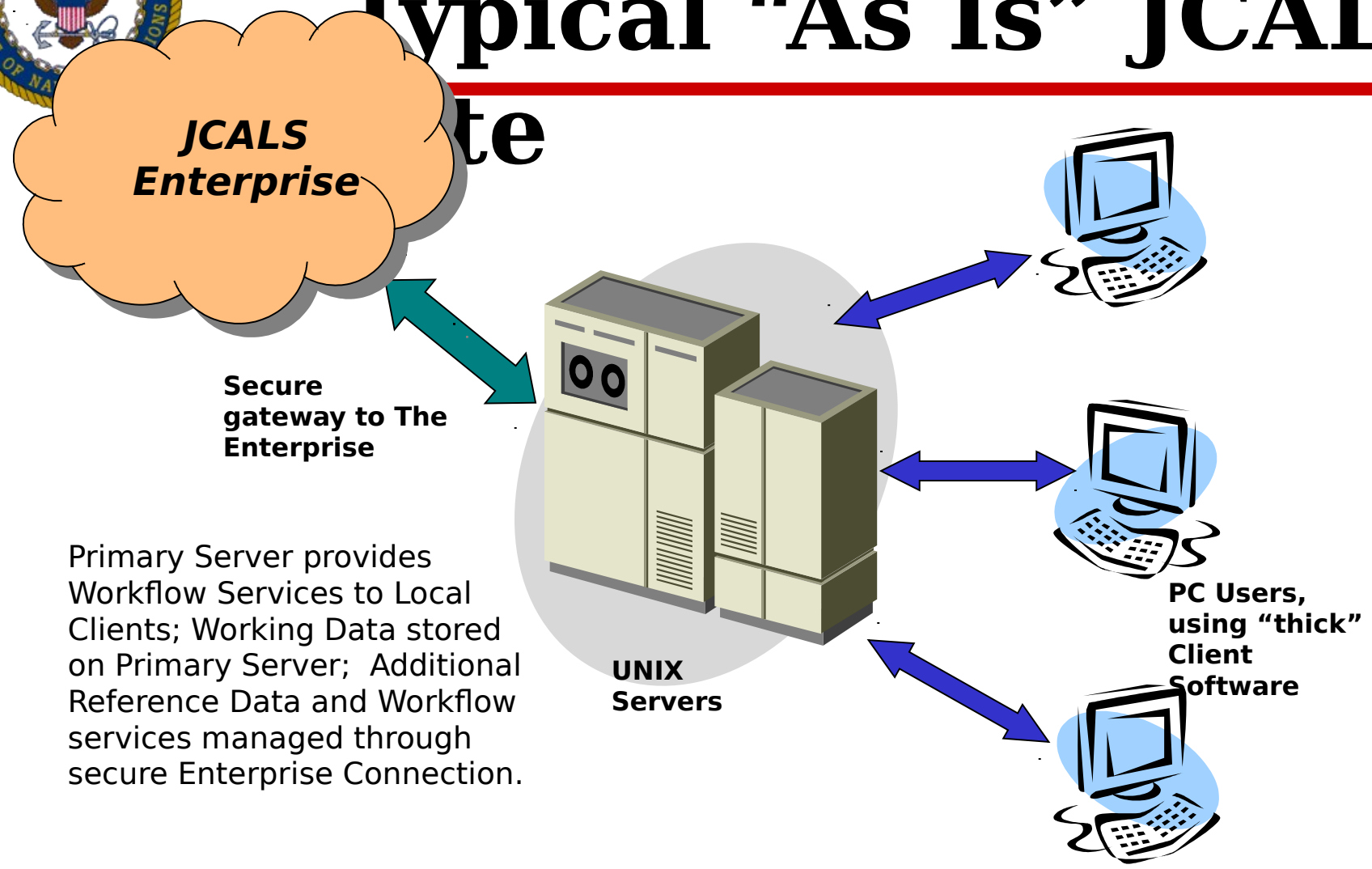
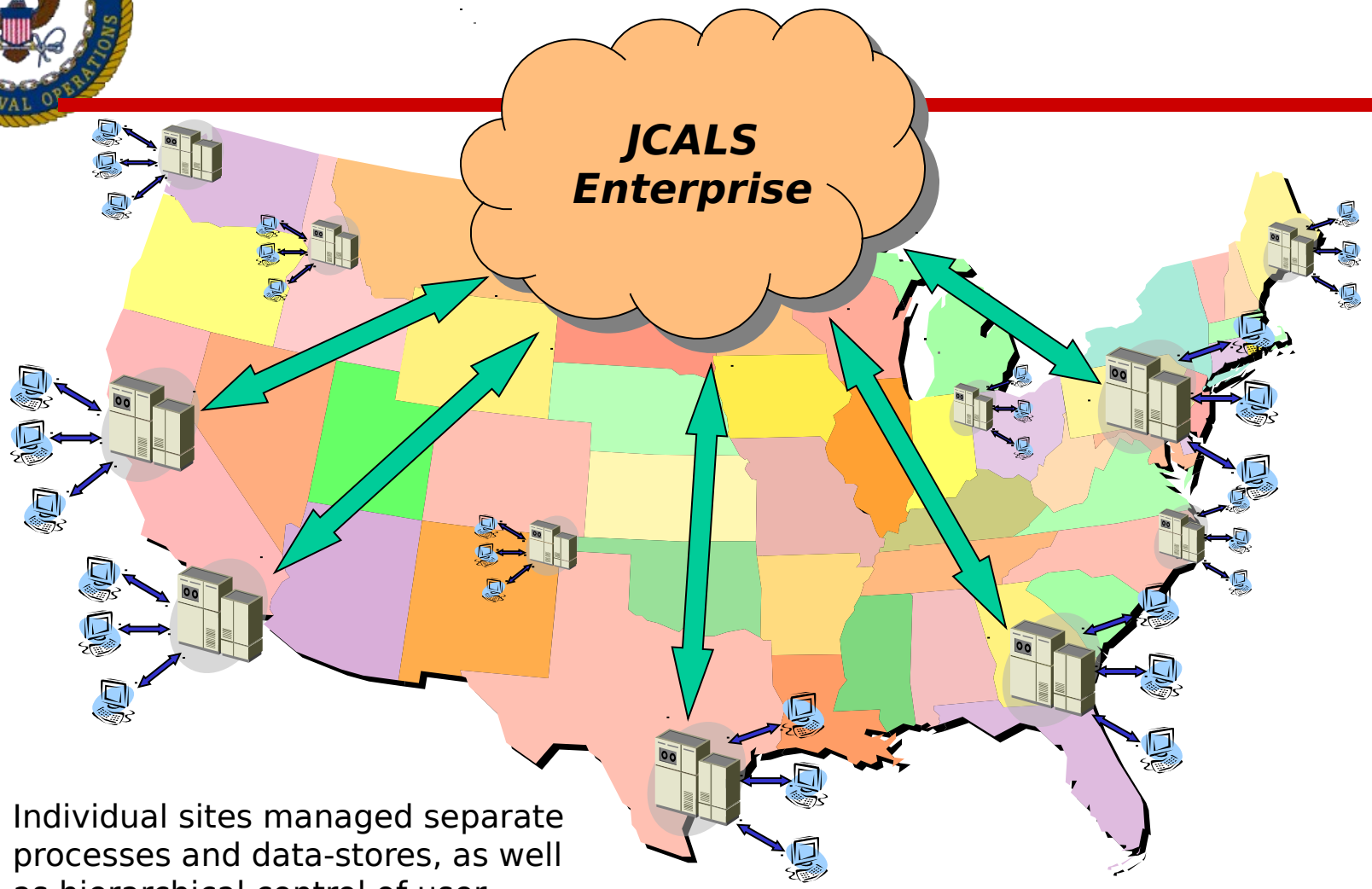
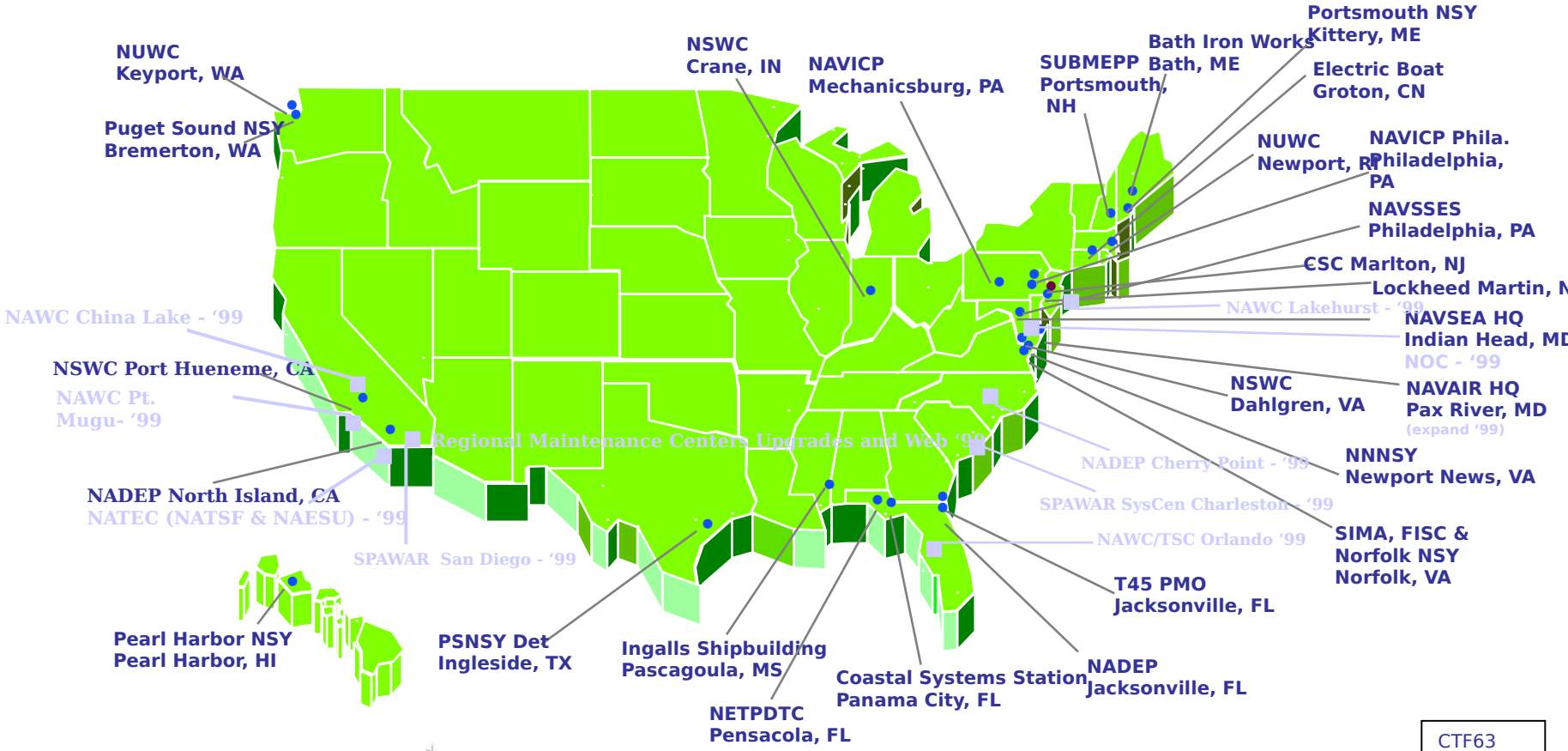


Primary Server provides Workflow Services to Local Clients; Working Data stored on Primary Server; Additional Reference Data and Workflow services managed through secure Enterprise Connection.



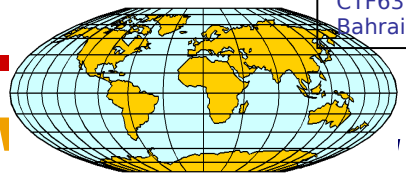
Individual sites managed separate processes and data-stores, as well as hierarchical control of user roles and privileges.

Current Navy JCALS Sites

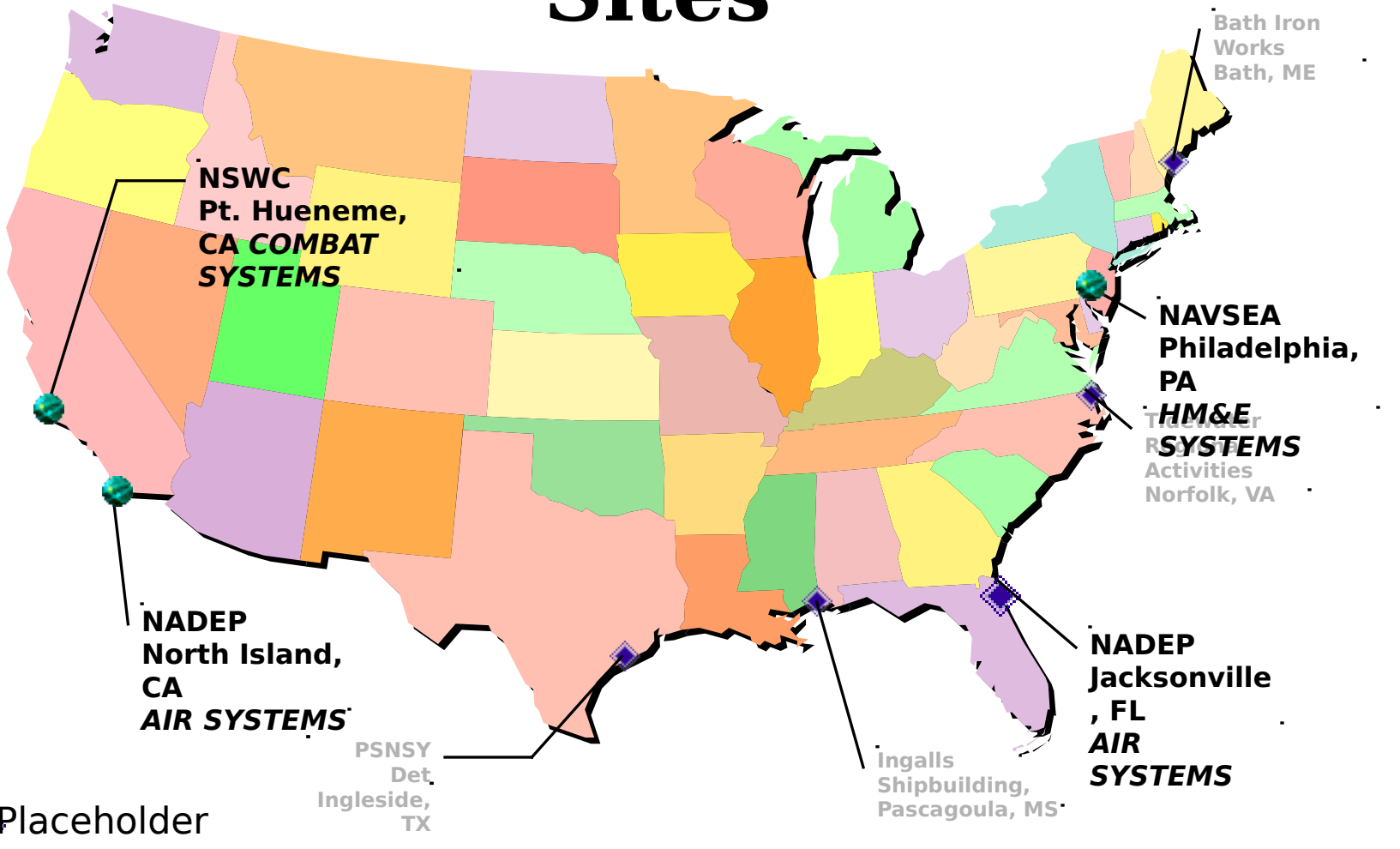


CG-48
USS Yorktown
(Pilot Project)

CTF63
Naples,
IT
CTF63
Bahrain

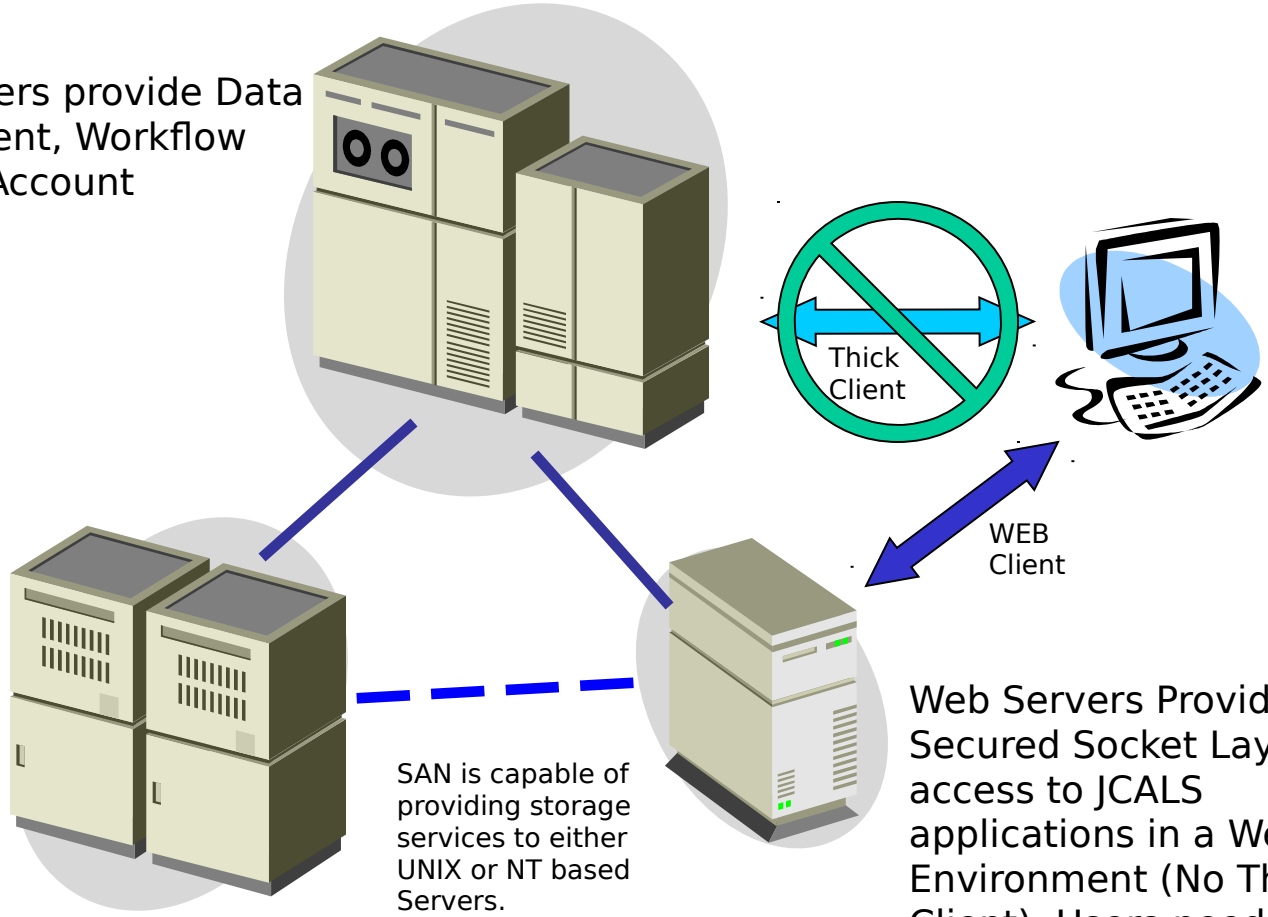


Proposed Regional Sites



Enhanced Navy Repository *Capabilities*

UNIX Servers provide Data Management, Workflow and User Account Services.

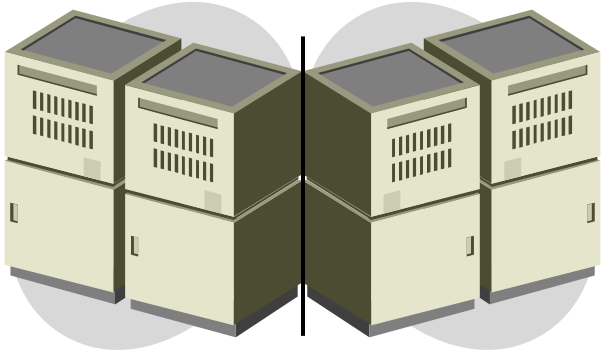


Storage Area Network (SAN) provides dynamic, expandable storage services with Backup and Disaster Recovery functionality.

SAN is capable of providing storage services to either UNIX or NT based Servers.

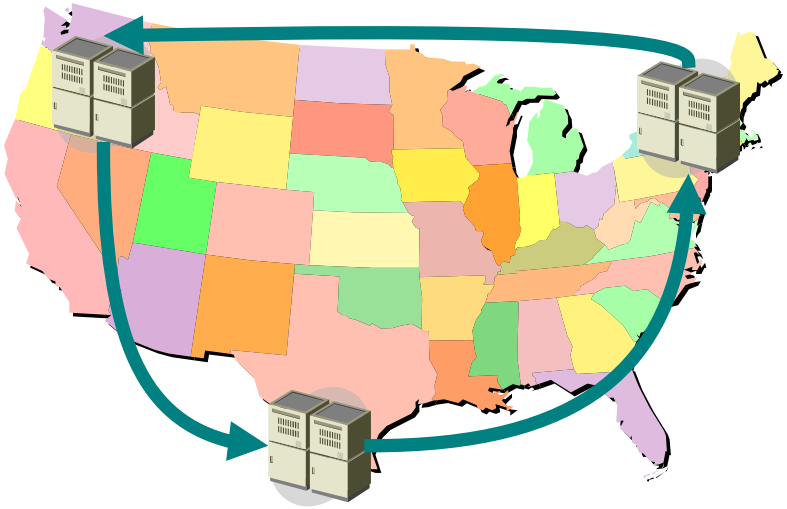
Web Servers Provide Secured Socket Layer (SSL) access to JCALS applications in a Web Environment (No Thick Client). Users need not be physically co-located with Data Servers.

Maintaining Safe Data Storage

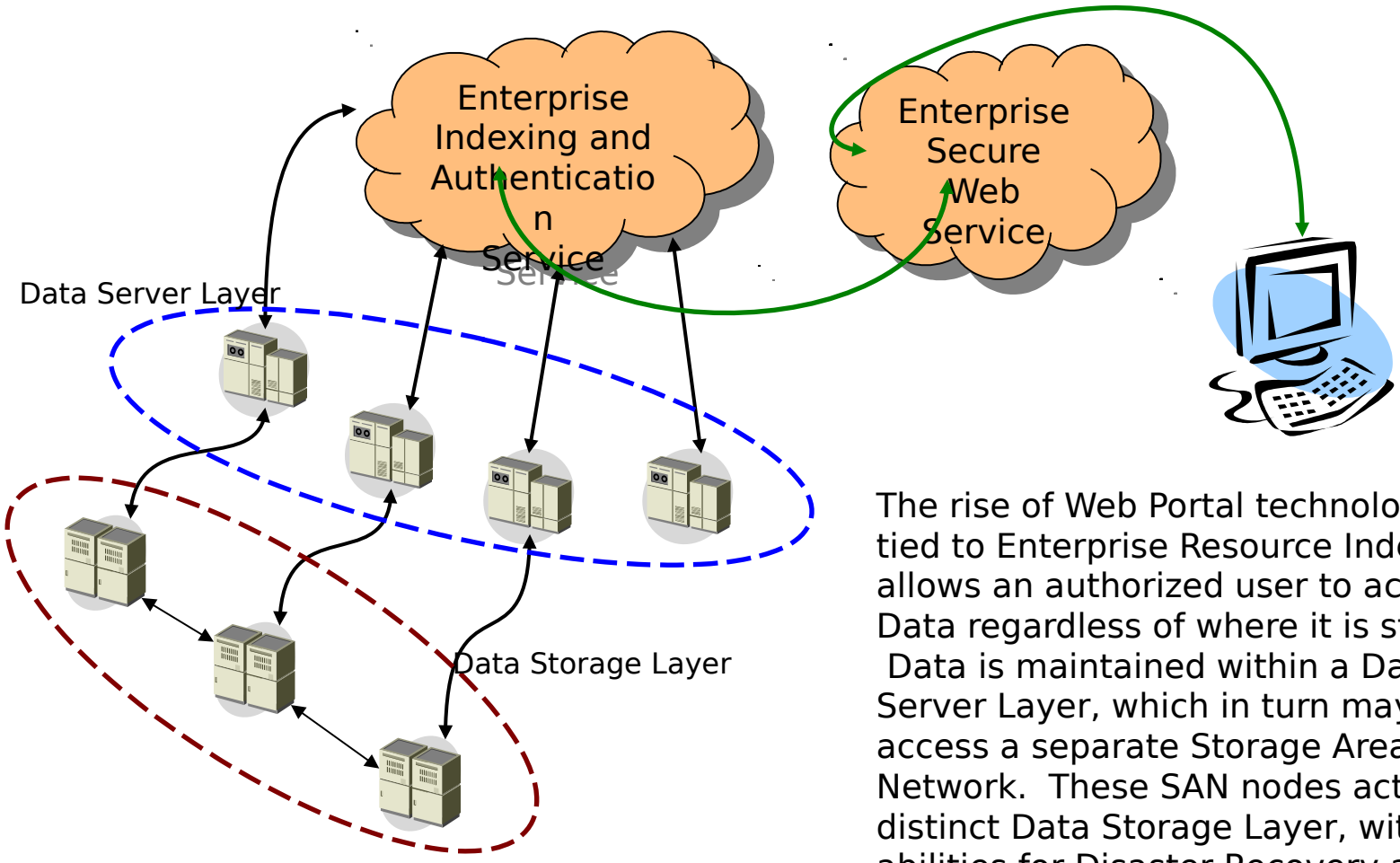


- Storage Area Networks implement Data Mirrors for on-site backups of active Volumes.
- Data Mirrors can be synchronized automatically, without disabling active storage Volumes, minimizing server down-time.

- In addition to on-site Data Mirrors, each storage node within the enterprise can be inter-networked with other storage nodes to effect an extended Disaster Recovery and Backup Scheme.

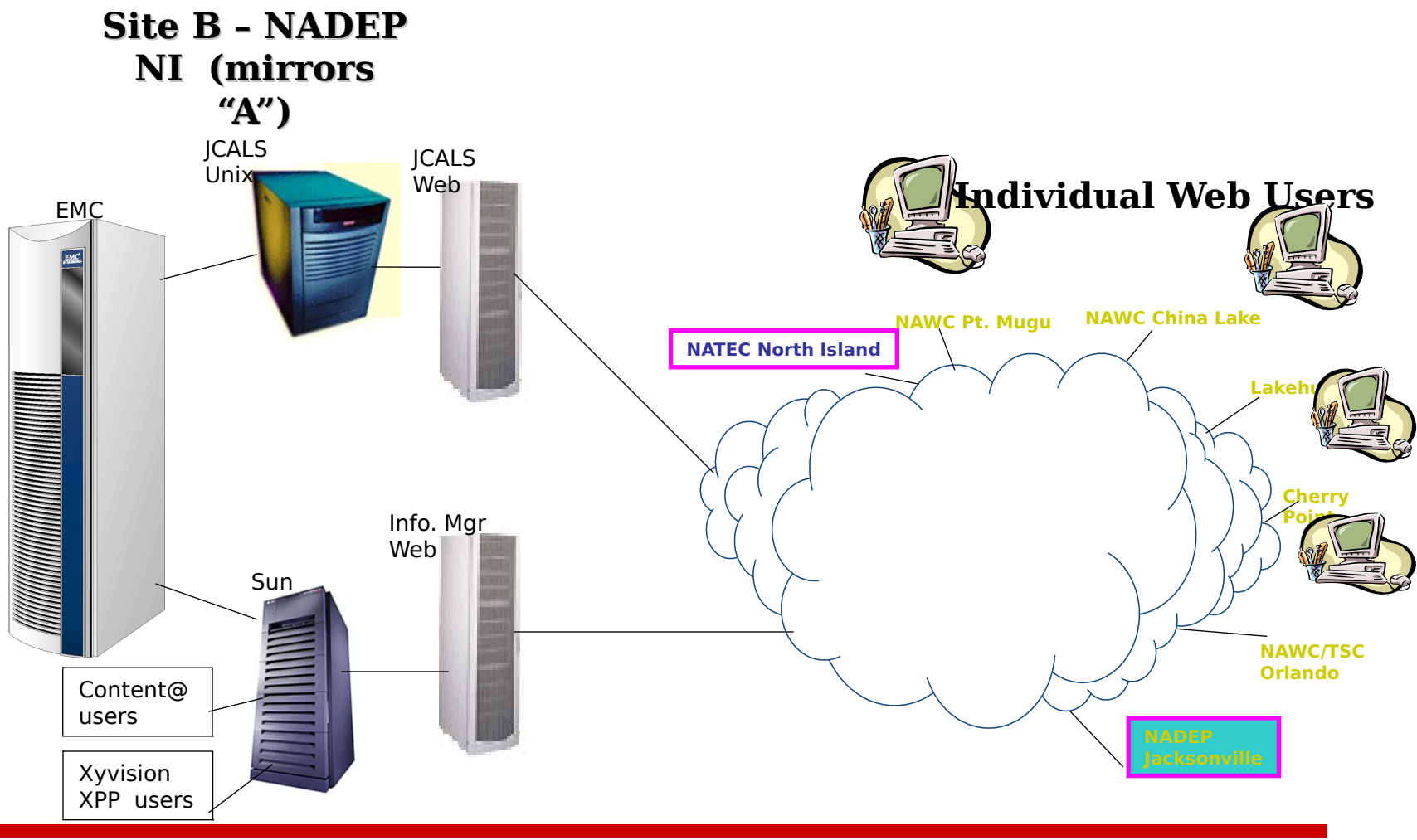


The Expanded Navy IDE



The rise of Web Portal technologies, tied to Enterprise Resource Indexing, allows an authorized user to access Data regardless of where it is stored. Data is maintained within a Data Server Layer, which in turn may access a separate Storage Area Network. These SAN nodes act as a distinct Data Storage Layer, with abilities for Disaster Recovery and Backup.

Navy Tech Data Authoring, Managing and Distribution



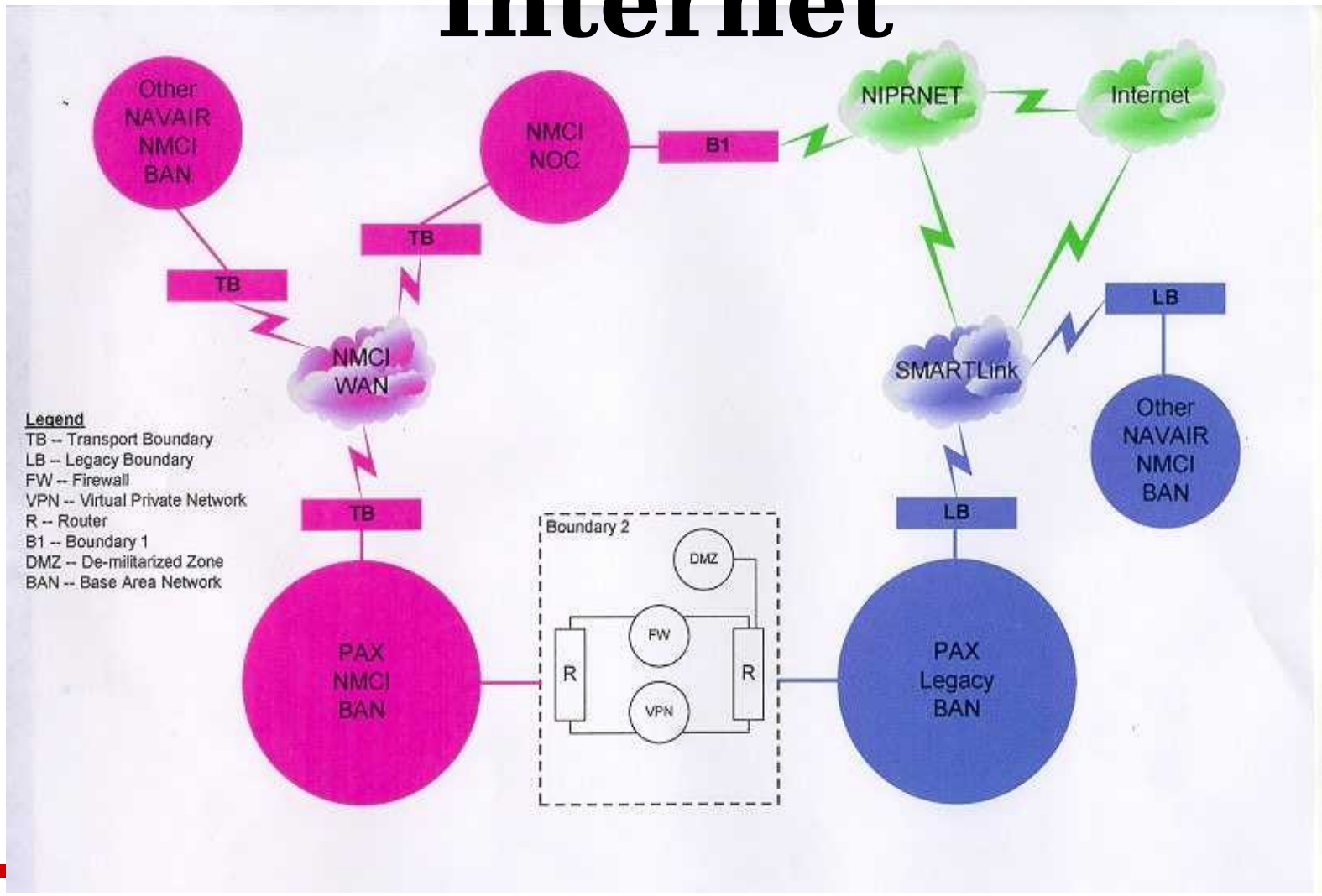
Benefits of Regionalization

- Reduces Navy host JCALS sites from 32 to 3
- Reduces both hardware and software sustainment costs
- Eliminates burden of System Administrators, Data Base Managers, and ISSO's at Navy sites
- Provides capability and capacity for future JEDMICS consolidation

Drivers, Challenges and Enablers

- Enablers
  - Technology
  - Navy Marine Corps Internet
  - JCALS Regionalization Initiative
- Drivers and Challenges
  - Existing Business Rules and site specific processes
  - Data formats
  - Navy Marine Corps Internet
  - Security
  - Integration with ERP
  - Non-JTM applications
  - Overcoming negative JCALS mindsets

Navy Marine Corps Internet



Implementation Time-Line